TENT COOPERATION TRE Y

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

To:

Assistant Commissioner for Patents
United States Patent and Trademark Office
Box PCT
Washington, D.C.20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 05 May 2000 (05.05.00)	
International application No. PCT/GB99/02988	**Applicant's or agent's file reference** P/23464.WO/MWM
International filing date (day/month/year) 08 September 1999 (08.09.99)	**Priority date** (day/month/year) 08 September 1998 (08.09.98)
Applicant SILVER, Andrew, George	

1. The designated Office is hereby notified of its election made:

[X] in the demand filed with the International Preliminary Examining Authority on:

04 April 2000 (04.04.00)

[ ] in a notice effecting later election filed with the International Bureau on:

2. The election [X] was

[ ] was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO **34, chemin des Colombettes** **1211 Geneva 20, Switzerland**	Authorized officer Juan Cruz
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	**FOR FURTHER ACTION** see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
P/23464.WO/MWM		
International application No.	International filing date *(day/month/year)*	(Earliest) Priority Date *(day/month/year)*
PCT/GB 99/02988	08/09/1999	08/09/1998
Applicant		
SILVER, ANDREW GEORGE		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.

[X] It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

a. With regard to the **language,** the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

[ ] the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

[ ] contained in the international application in written form.

[ ] filed together with the international application in computer readable form.

[ ] furnished subsequently to this Authority in written form.

[ ] furnished subsequently to this Authority in computer readble form.

[ ] the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

[ ] the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. [ ] **Certain claims were found unsearchable** (See Box I).

3. [ ] **Unity of invention is lacking** (see Box II).

4. With regard to the **title,**

[X] the text is approved as submitted by the applicant.

[ ] the text has been established by this Authority to read as follows:

5. With regard to the **abstract,**

[X] the text is approved as submitted by the applicant.

[ ] the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. 3

[X] as suggested by the applicant.

[ ] because the applicant failed to suggest a figure.

[ ] because this figure better characterizes the invention.

[ ] None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No
T/GB 99/02988

A. CLASSIFICATION OF SUBJECT M R
IPC 7 B62B13/04 B61B11/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B62B B61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 097 055 A (LAYCRAFT KEVIN WENDELL) 27 June 1978 (1978-06-27) the whole document ---	1,2, 5-11,13, 14,17-19
X	FR 2 521 937 A (TRANVOIZ RENE) 26 August 1983 (1983-08-26) the whole document ---	1,2,5, 10-14
A	US 3 870 330 A (HATANO FUKUJI ET AL) 11 March 1975 (1975-03-11) -----	

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
15 December 1999	22/12/1999

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	De Schepper, H

1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/GB 99/02988

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4097055 A	27-06-1978	CA 1068751 A	24-12-1979
FR 2521937 A	26-08-1983	NONE	
US 3870330 A	11-03-1975	CA 998721 A	19-10-1976

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
P/23464.WO/MWM		
International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/GB99/02988	08/09/1999	08/09/1998
International Patent Classification (IPC) or national classification and IPC B62B13/04		
Applicant SILVER, ANDREW GEORGE		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

   ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of 8 sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the report
   - II ☐ Priority
   - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations suporting such statement
   - VI ☐ Certain documents cited
   - VII ☐ Certain defects in the international application
   - VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
04/04/2000	13.11.2000
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Wochinz, R Telephone No. +49 89 2399 2129

Form PCT/IPEA/409 (cover sheet) (January 1994)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB99/02988

I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).)*:
Description, pages:

1,3,5-11	as originally filed			
4a	as received on	03/07/2000	with letter of	26/06/2000
2,2a,4	as received on	11/09/2000	with letter of	06/09/2000

Claims, No.:

6-19	as received on	03/07/2000	with letter of	26/06/2000
1-5,20	as received on	11/09/2000	with letter of	06/09/2000

Drawings, sheets:

1/5-5/5	as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

   These elements were available or furnished to this Authority in the following language: , which is:

   - ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
   - ☐ the language of publication of the international application (under Rule 48.3(b)).
   - ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

   - ☐ contained in the international application in written form.
   - ☐ filed together with the international application in computer readable form.
   - ☐ furnished subsequently to this Authority in written form.
   - ☐ furnished subsequently to this Authority in computer readable form.
   - ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
   - ☐ The statement that the information recorded in computer readable form is identical to the written sequence

listing has been furnished.

4. The amendments have resulted in the cancellation of:

   ☐ the description, pages:

   ☐ the claims, Nos.:

   ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

   (Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-20
	No:	Claims	
Inventive step (IS)	Yes:	Claims	15
	No:	Claims	1-14, 16-20
Industrial applicability (IA)	Yes:	Claims	1-20
	No:	Claims	

2. Citations and explanations
   see separate sheet

SECTION V:

1. Claim 1:

1.1 None of the documents cited in the International Search Report shows a snow-type bike according to claim 1. The subject-matter of claim 1 is therefore new over the known state of the art (Article 33(2) PCT).

1.2 Document US-A-4,097,055 (D1) is considered as being the closest prior art to the subject-matter of claim 1 and shows a snow-type bike according to the preamble of claim 1.

1.3 The subject-matter of claim 1 differs from this known snow-type bike in the features of the characterizing part of claim 1.

1.4 These features result in a snow-type bike, which can be used over rough ground more freely.

1.5 However, it would be apparent to the person skilled in the art, that the body (200) of document US-A-3,870,330 (D3), which consists of two bent tubes resp. pipes (see D3: column 3, lines 55-59 and Figures 1-3), also permits the rear ski member (204) to flex between the two spaced locations (by plate 210, nut 211, etc. and by plate 205, nut 206). This flexing is possible due to the flexible nature of a ski, in this case the rear ski plate 204, and due to the flexible nature of the frame (201, 202), see for example D3: column 4, lines 43-45.
Applying such a body to the snow-type bike of D1 would be possible without any additional change to the construction of the snow-type bike.

1.6 The subject-matter of **claim 1** does therefore not involve an inventive step (Article 33(3) PCT).

1.7 In this connection it should be taken into consideration that the wording "means being provided for permitting the rear ski member to flex between said spaced locations" has such a broad scope, that claim 1 could even be regarded as not being new (Article 33(2) PCT), because the attachment of a (generally flexible) ski

at two clearly spaced locations, as it is shown in D1, always allows a certain amount of flexing of the ski, which would also be included in this broad wording.

2. Concerning the dependent claims:

2.1 In addition, D1 shows a snow-type bike according to the additional features of claims 2, 5, 7, 8, 9, 10, 11, 13, 14, 17, 18 and 19.

2.2 The subject-matter of **claims 2, 5, 7, 8, 9, 10, 11, 13, 14, 17, 18 and 19** therefore lacks an inventive step (Article 33(3) PCT).

2.3 In claims 3, 4 and 20 slight constructional changes in the snow-type bike of claim 1 are defined which come within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can readily be foreseen. Consequently, the subject-matter of **claims 3, 4 and 20** lacks an inventive step (Article 33(3) PCT).

2.4 The subject-matter of claim 6 differs from the snow-type bike of D1 only in the third frame member carrying said footrest means. However, it would be clear to the person skilled in the art that the footrest means can be fixed at any part of the frame which gives a suitable arrangement of said footrest means relative to the user of the snow-type bike, the third frame member being one of these parts. The subject-matter of **claim 6** can therefore not be regarded as involving an inventive step (Article 33(3) PCT).

2.5 Document D2, which belongs to the same field as D1, shows a snow-type bike according to the additional features of claim 12.

Document D2 also shows the frame means being (indirectly) attached to the rear ski member by suspension means.

Consequently, the subject-matter of **claims 12 and 16** also lacks an inventive step (Article 33(3) PCT).

3. The industrial applicability is given for all claims (Article 33(4) PCT).

connected toward a rearward end of the rear ski 30. The rear ski 30 supports a platform 31 having an upturned rear end and at a forward end is located a strap 32 for securing a user's feet, in use located one on each side of the frame member 22. In use of the device of Figure 2, a user stands with both feet on the rear ski 30 and steers the device by the handlebars 26.

It is known that users of BMX bikes like to jump over obstacles and to perform freestyle movements of the bikes and of themselves when in mid-air, and a similar desire exists with snow enthusiasts. Neither of the forementioned devices are able to permit such freestyle use to the level and style found in BMX-ing. In the former device of Figure 1, a user, of necessity, has to use a pair of foot skis because the rear ski 12 is too narrow to support a user, and in the snowscoot of Figure 2 a user's feet are secured to the rear ski which may cause a user injury in a crash. Furthermore, the snowscoot of Figure 2 does not have a seat.

The present invention seeks to at least partially mitigate the foregoing disadvantages.

According to this invention there is provided a snow-type bike for use in snow comprising frame means supporting seat means for a user and steering means; a rear ski member attached to said frame means; a forward ski member attached to said steering means; footrest means extending on each side of said frame means at a location between said seat means and the plane of said rear ski member.

Preferably, footrest means is located on said frame means or on said rear ski member.

Preferably, the forward and rear ski members have a width two or more times, preferably four times, the width of a normal recreation ski.

Conveniently, the front and rear ski members have the same width.

In an embodiment of the invention the frame means is attached to the rear ski member by suspension means and, advantageously, the steering means may be attached to the forward ski member through the intermediary of one or more suspension members.

Where the front ski member is pivotally connected to the steering means, preferably means are provided for damping pivotal motion of said front ski member.

Advantageously, the frame means is attached to the rear ski member at longitudinally spaced locations of the frame and means are provided for permitting the rear ski member to flex between said spaced locations.

In this invention the footrest means are located above the rear ski member giving substantial room for a user's feet to extend over the edge of the rear ski member, if desired, without the user's feet hitting the ground. A user is, thus, able to stand on the footrest means with their legs slightly apart giving a more natural stance during normal riding. The invention has the following advantages:

1. A user can absorb greater vertical impact from a jump without exerting masses of forward or backward lean which impairs control and stability.

2. A user can take greater vertical impact from a jump, absorbing the pressure through the bike and the user's legs simultaneously.

3. A user can ride over rough ground more freely.

4. A user's feet are not restricted by skis, as in Figure 1, or a strap, as in Figure 2, so that a user is able to perform a greater number of popular freestyle manoeuvres.

5. Without the requirement of skis on a user's feet, as in Figure 1, or the strap of Figure 2, a user is less likely to sustain leg injury.

6. A user who has larger feet or who is wearing warmer, bulkier footwear will not have their performance

CLAIMS:

1. A snow-type bike for use in snow comprising frame means (50 - 53) supporting seat means (60, 61) for a user and steering means (54 - 59, 70); a rear ski member (67) attached to said frame means; a forward ski member (72) attached to said steering means; footrest means (62) extending on each side of said frame means at a location between said seat means and the plane of said rear ski member.

2. A snow-type bike as claimed in claim 1, wherein the footrest means is located on said frame means or on said rear ski member.

3. A snow-type bike as claimed in claim 1 or 2, wherein the forward (72) and rear (67) ski members have a width two or more times the width of a normal recreation ski.

4. A snow-type bike as claimed in claim 3, wherein the forward (72) and rear (67) ski members have a width four times the width of a normal recreation ski.

5. A snow-type bike as claimed in any preceding claim, wherein the front and rear ski members have the same width.

6. A snow-type bike as claimed in any preceding claim, wherein said frame means comprises first (51) and second (52) frame members each joined at a respective first end thereof to a headset member (54) and joined at a second, opposed end thereof to a third frame member (53), said third frame member being located substantially parallel to said rear ski member (67), said third frame member carrying said footrest means (62).

7. A snow-type bike as claimed in claim 6, wherein the footrest means comprise a pair of footrests (62) extending one on each side of said frame means.

8. A snow-type bike as claimed in claim 6, wherein the vicinity of the juxta position of the first and third frame members and the second and third frame members forms a securing location of the frame means to the rear ski member.

9. A snow-type bike as claimed in any of claims 6 to 8, wherein the first frame member (51) supports the seat means (60, 61).

10. A snow-type bike as claimed in any of claims 6 to 9, wherein the headset (54) pivotally supports the steering means (55 - 59, 70) which comprises a pair of handlebars (57) attached to at least one fork member (70), a lower end of at least one fork member being attached to the forward ski member (72).

11. A snow-type bike as claimed in claim 10, wherein a pair of fork members are provided.

12. A snow-type bike as claimed in claim 10 or 11, wherein the handlebars at a location in the vicinity of the headset are shaped and spaced to accommodate a drag lift (75) or other tow lift.

13. A snow-type bike as claimed in claim 11 or 12, wherein the fork members (70) are pivotally attached directly or indirectly to the forward ski member.

14. A snow-type bike as claimed in claim 11, 12 or 13, wherein the forward ski member (72) is pivotally attached to

the fork members for movement about at least one of an axis which is transverse to the longitudinal direction of the frame means and an axis which is along the longitudinal direction of the frame means, both said axes being defined when the forward and rear ski members are aligned.

15. A snow-type bike as claimed in any preceding claim, wherein the rear ski member (67) is pivotally attached to the frame means for movement about a longitudinal axis of the frame means.

16. A snow-type bike as claimed in any preceding claim, wherein the frame means (80) is attached to the rear ski member (86) by suspension means (84, 85).

17. A snow-type bike as claimed in any preceding claim, wherein the steering means is attached to the forward ski member (72) through the intermediary of one or more suspension members (97).

18. A snow-type bike as claimed in any preceding claim, wherein, where the front ski member is pivotally connected to the steering means, there is provided means for damping pivotal motion of said front ski member.

19. A snow-type bike as claimed in any preceding claim, wherein the frame means is attached to the rear ski member (67) at longitudinally spaced locations of the frame and means (120, 121, 128) are provided for permitting the rear ski member to flex between said spaced locations.

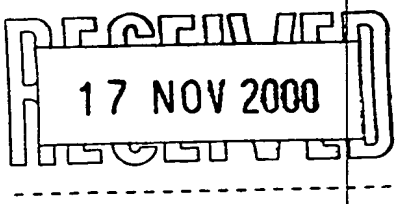
PATENT COOPERATION TREATY

U013288-1

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

LANGNER PARRY
52-54 High Holborn
London WC1V 6RR
GRANDE BRETAGNE



PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing *(day/month/year)*	13.11.2000
Applicant's or agent's file reference P/23464.WO/MWM	**IMPORTANT NOTIFICATION**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/GB99/02988	08/09/1999	08/09/1998

Applicant
SILVER, ANDREW GEORGE

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.

2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.

3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/	Authorized officer
European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Murphy-Minehane, B Tel. +49 89 2399-2753

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
P/23464.WO/MWM		
International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/GB99/02988	08/09/1999	08/09/1998
International Patent Classification (IPC) or national classification and IPC B62B13/04		
Applicant SILVER, ANDREW GEORGE		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

   ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of 8 sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the report
   - II ☐ Priority
   - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations suporting such statement
   - VI ☐ Certain documents cited
   - VII ☐ Certain defects in the international application
   - VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
04/04/2000	13.11.2000
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Wochinz, R Telephone No. +49 89 2399 2129

Form PCT/IPEA/409 (cover sheet) (January 1994)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB99/02988

I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).)*:
Description, pages:

1,3,5-11	as originally filed			
4a	as received on	03/07/2000	with letter of	26/06/2000
2,2a,4	as received on	11/09/2000	with letter of	06/09/2000

Claims, No.:

6-19	as received on	03/07/2000	with letter of	26/06/2000
1-5,20	as received on	11/09/2000	with letter of	06/09/2000

Drawings, sheets:

1/5-5/5	as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

   These elements were available or furnished to this Authority in the following language: , which is:

   - ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
   - ☐ the language of publication of the international application (under Rule 48.3(b)).
   - ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

   - ☐ contained in the international application in written form.
   - ☐ filed together with the international application in computer readable form.
   - ☐ furnished subsequently to this Authority in written form.
   - ☐ furnished subsequently to this Authority in computer readable form.
   - ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
   - ☐ The statement that the information recorded in computer readable form is identical to the written sequence

listing has been furnished.

4. The amendments have resulted in the cancellation of:

   ☐ the description, pages:

   ☐ the claims, Nos.:

   ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

   (Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-20
	No:	Claims	
Inventive step (IS)	Yes:	Claims	15
	No:	Claims	1-14, 16-20
Industrial applicability (IA)	Yes:	Claims	1-20
	No:	Claims	

2. Citations and explanations
   see separate sheet

SECTION V:

1. Claim 1:

1.1 None of the documents cited in the International Search Report shows a snow-type bike according to claim 1. The subject-matter of claim 1 is therefore new over the known state of the art (Article 33(2) PCT).

1.2 Document US-A-4,097,055 (D1) is considered as being the closest prior art to the subject-matter of claim 1 and shows a snow-type bike according to the preamble of claim 1.

1.3 The subject-matter of claim 1 differs from this known snow-type bike in the features of the characterizing part of claim 1.

1.4 These features result in a snow-type bike, which can be used over rough ground more freely.

1.5 However, it would be apparent to the person skilled in the art, that the body (200) of document US-A-3,870,330 (D3), which consists of two bent tubes resp. pipes (see D3: column 3, lines 55-59 and Figures 1-3), also permits the rear ski member (204) to flex between the two spaced locations (by plate 210, nut 211, etc. and by plate 205, nut 206). This flexing is possible due to the flexible nature of a ski, in this case the rear ski plate 204, and due to the flexible nature of the frame (201, 202), see for example D3: column 4, lines 43-45.
Applying such a body to the snow-type bike of D1 would be possible without any additional change to the construction of the snow-type bike.

1.6 The subject-matter of **claim 1** does therefore not involve an inventive step (Article 33(3) PCT).

1.7 In this connection it should be taken into consideration that the wording "means being provided for permitting the rear ski member to flex between said spaced locations" has such a broad scope, that claim 1 could even be regarded as not being new (Article 33(2) PCT), because the attachment of a (generally flexible) ski

at two clearly spaced locations, as it is shown in D1, always allows a certain amount of flexing of the ski, which would also be included in this broad wording.

2. Concerning the dependent claims:

2.1 In addition, D1 shows a snow-type bike according to the additional features of claims 2, 5, 7, 8, 9, 10, 11, 13, 14, 17, 18 and 19.

2.2 The subject-matter of **claims 2, 5, 7, 8, 9, 10, 11, 13, 14, 17, 18 and 19** therefore lacks an inventive step (Article 33(3) PCT).

2.3 In claims 3, 4 and 20 slight constructional changes in the snow-type bike of claim 1 are defined which come within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can readily be foreseen. Consequently, the subject-matter of **claims 3, 4 and 20** lacks an inventive step (Article 33(3) PCT).

2.4 The subject-matter of claim 6 differs from the snow-type bike of D1 only in the third frame member carrying said footrest means. However, it would be clear to the person skilled in the art that the footrest means can be fixed at any part of the frame which gives a suitable arrangement of said footrest means relative to the user of the snow-type bike, the third frame member being one of these parts. The subject-matter of **claim 6** can therefore not be regarded as involving an inventive step (Article 33(3) PCT).

2.5 Document D2, which belongs to the same field as D1, shows a snow-type bike according to the additional features of claim 12.

Document D2 also shows the frame means being (indirectly) attached to the rear ski member by suspension means.

Consequently, the subject-matter of **claims 12 and 16** also lacks an inventive step (Article 33(3) PCT).

3. The industrial applicability is given for all claims (Article 33(4) PCT).

connected toward a rearward end of the rear ski 30. The rear ski 30 supports a platform 31 having an upturned rear end and at a forward end is located a strap 32 for securing a user's feet, in use located one on each side of the frame member 22. In use of the device of Figure 2, a user stands with both feet on the rear ski 30 and steers the device by the handlebars 26.

It is known that users of BMX bikes like to jump over obstacles and to perform freestyle movements of the bikes and of themselves when in mid-air, and a similar desire exists with snow enthusiasts. Neither of the forementioned devices are able to permit such freestyle use to the level and style found in BMX-ing. In the former device of Figure 1, a user, of necessity, has to use a pair of foot skis because the rear ski 12 is too narrow to support a user, and in the snowscoot of Figure 2 a user's feet are secured to the rear ski which may cause a user injury in a crash. Furthermore, the snowscoot of Figure 2 does not have a seat.

US-A-4,097,055, FR-A-2 521 937 and US-A-3,870,330 disclose a snow-type bike having a frame supporting a seat for a user and located beneath the seat is a rear ski member. A forward ski member is attached to a handlebar steering member. Footrests extend on each side of the frame at a location between the seat and the plane of the rear ski member. However, in such prior art arrangements the rear ski member is fixedly secured to the frame and, as a result, not only are such snow-type bikes uncomfortable but also the rear ski member tends to fracture in use.

The present invention seeks to at least partially mitigate the foregoing disadvantages.

According to a first aspect of this invention there is provided a snow-type bike for use in snow comprising frame

means supporting seat means for a user and steering means, said frame means having a longitudinal axis, a rear ski member attached to said frame means, a forward ski member attached to said steering means, the attachment of said rear and forward ski members being on said longitudinal axis and the attachment of the frame means to the rear ski member being at longitudinally spaced locations of the frame means, and footrest means extending on each side of the frame means at a location between said seat means and the plane of said rear ski member, characterised by means being provided for permitting the rear ski member to flex between said spaced locations.

Preferably, footrest means is fixedly located on said frame means or on said rear ski member.

Preferably, the forward and rear ski members have a width two or more times, preferably four times, the width of a normal recreation ski.

Conveniently, the front and rear ski members have the same width.

In an embodiment of the invention the frame means is attached to the rear ski member by suspension means and, advantageously, the steering means may be attached to the forward ski member through the intermediary of one or more suspension members.

Where the front ski member is pivotally connected to the steering means, preferably means are provided for damping pivotal motion of said front ski member.

Advantageously, the frame means is attached to the rear ski member at longitudinally spaced locations of the frame and means are provided for permitting the rear ski member to flex between said spaced locations.

Preferably, said footrest means include an abrasive upper foot engaging surface.

In this invention the footrest means are located above the rear ski member giving substantial room for a user's feet to extend over the edge of the rear ski member, if desired, without the user's feet hitting the ground. A user is, thus, able to stand on the footrest means with their legs slightly apart giving a more natural stance during normal riding. The invention has the following advantages:

1. A user can absorb greater vertical impact from a jump without exerting masses of forward or backward lean which impairs control and stability.

2. A user can take greater vertical impact from a jump, absorbing the pressure through the bike and the user's legs simultaneously.

3. A user can ride over rough ground more freely.

4. A user's feet are not restricted by skis, as in Figure 1, or a strap, as in Figure 2, so that a user is able to perform a greater number of popular freestyle manoeuvres.

5. Without the requirement of skis on a user's feet, as in Figure 1, or the strap of Figure 2, a user is less likely to sustain leg injury.

6. A user who has larger feet or who is wearing warmer, bulkier footwear will not have their performance

CLAIMS:

1. A snow-type bike for use in snow comprising frame means (50-53) supporting seat means (60, 61) for a user and steering means (54-59, 70), said frame means having a longitudinal axis, a rear ski member (67) attached to said frame means, a forward ski member attached to said steering means, the attachment of said rear and forward ski members being on said longitudinal axis and the attachment of the frame means to the rear ski member being at longitudinally spaced locations of the frame means, and footrest means (62) extending on each side of the frame means at a location between said seat means and the plane of said rear ski member, characterised by means being provided for permitting the rear ski member to flex between said spaced locations.

2. A snow-type bike as claimed in claim 1, wherein the footrest means is fixedly located on said frame means or on said rear ski member.

3. A snow-type bike as claimed in claim 1 or 2, wherein the forward (72) and rear (67) ski members have a width two or more times the width of a normal recreation ski.

4. A snow-type bike as claimed in claim 3, wherein the forward (72) and rear (67) ski members have a width four times the width of a normal recreation ski.

5. A snow-type bike as claimed in any preceding claim, wherein the front and rear ski members have the same width.

6. A snow-type bike as claimed in any preceding claim, wherein said frame means comprises first (51) and second (52) frame members each joined at a respective first end thereof to a headset member (54) and joined at a second, opposed end thereof to a third frame member (53), said third frame member being located substantially parallel to said rear ski member (67), said third frame member carrying said footrest means (62).

7. A snow-type bike as claimed in claim 6, wherein the footrest means comprise a pair of footrests (62) extending one on each side of said frame means.

8. A snow-type bike as claimed in claim 6, wherein the vicinity of the juxta position of the first and third frame members and the second and third frame members forms a securing location of the frame means to the rear ski member.

9. A snow-type bike as claimed in any of claims 6 to 8, wherein the first frame member (51) supports the seat means (60, 61).

10. A snow-type bike as claimed in any of claims 6 to 9, wherein the headset (54) pivotally supports the steering means (55 - 59, 70) which comprises a pair of handlebars (57) attached to at least one fork member (70), a lower end of at least one fork member being attached to the forward ski member (72).

11. A snow-type bike as claimed in claim 10, wherein a pair of fork members are provided.

12. A snow-type bike as claimed in claim 10 or 11, wherein the handlebars at a location in the vicinity of the headset are shaped and spaced to accommodate a drag lift (75) or other tow lift.

13. A snow-type bike as claimed in claim 11 or 12, wherein the fork members (70) are pivotally attached directly or indirectly to the forward ski member.

14. A snow-type bike as claimed in claim 11, 12 or 13, wherein the forward ski member (72) is pivotally attached to the fork members for movement about at least one of an axis which is transverse to the longitudinal direction of the frame means and an axis which is along the longitudinal direction of the frame means, both said axes being defined when the forward and rear ski members are aligned.

15. A snow-type bike as claimed in any preceding claim, wherein the rear ski member (67) is pivotally attached to the frame means for movement about a longitudinal axis of the frame means.

16. A snow-type bike as claimed in any preceding claim, wherein the frame means (80) is attached to the rear ski member (86) by suspension means (84, 85).

17. A snow-type bike as claimed in any preceding claim, wherein the steering means is attached to the forward ski member (72) through the intermediary of one or more suspension members (97).

18. A snow-type bike as claimed in any preceding claim, wherein, where the front ski member is pivotally connected to the steering means, there is provided means for damping pivotal motion of said front ski member.

19. A snow-type bike as claimed in any preceding claim, wherein said means for permitting the rear ski member to flex include resilient bushings.

20. A snow-type bike as claimed in any preceding claim, wherein said footrest means include an abrasive upper foot engaging surface.